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IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF :  
ATSUSHI MATSUTANI : EXAMINER: ROBINSON, G.  
SERIAL NO: 10/586,922 :  
FILED: JULY 24, 2006 : GROUP ART UNIT: 2169  
FOR: PROGRAM SEARCH DEVICE :

APPEAL BRIEF

COMMISSIONER FOR PATENTS  
ALEXANDRIA, VIRGINIA 22313

SIR:

This is an appeal from the decision of the Examiner dated July 15, 2010 which finally rejected Claims 1, 2, 4-8, and 10-15 in the above-identified patent application. A Notice of Appeal was timely filed on October 6, 2010.

I. REAL PARTY-IN-INTEREST

The real party-in-interest is Sony Corporation.

II. RELATED APPEALS AND INTERFERENCES

Appellants, Appellants' legal representative, and the assignees are aware of no appeals which will directly affect or be directly affected by or have a bearing on the Board's decision in this appeal.

### III. STATUS OF CLAIMS

Claims 1, 2, 4-8, and 10-15 have been finally rejected and Claims 3 and 9 have been canceled without prejudice or disclaimer. The rejection of Claims 1, 2, 4-8, and 10-15 forms the basis for this appeal. Appendix VIII includes a clean copy of Claims 1, 2, 4-8, and 10-15.

### IV. STATUS OF AMENDMENTS

No amendment after final rejection has been filed.

### V. SUMMARY OF CLAIMED SUBJECT MATTER

Independent Claim 1 is directed to a program search system including a keyword registration unit configured to register a keyword for showing the user's preference in broadcast programs (client terminal 2, page 16, line 26 to page 17, line 2); a communication unit, including a processor, configured to receive broadcast content information including the titles of said broadcast programs that will be broadcasted by one or more broadcasting stations (client terminal 2, page 18, lines 1-11); and a detector configured to detect an appearance frequency of said keyword by said broadcast programs by searching the broadcast content information received by said communication unit (client terminal 2, page 18, lines 12-14). The detector is configured to generate a ranking of said broadcast programs in a descending order of a higher appearance frequency of said keyword as a search result. (client terminal 2, page 18, line 15 to page 19, line 29) The detector is configured to generate the ranking based on a number of times the keyword appears in each broadcast program. (client terminal 2, page 19, lines 22-29)

Independent Claim 7 is directed to a program search system including a storage medium configured to store broadcast content information including the broadcasting time and date and the title of a broadcast program that will be broadcasted by one or more

broadcasting stations by the above broadcast programs (provision server PS, page 22, lines 16-24); a receiver, including a processor, configured to receive search condition information to specify at least either one of the broadcasting period, the title and the broadcasting station name of said broadcast program as a search condition, and a keyword showing the user's preference in said broadcast programs, from an external device (provision server PS, page 21, line 27 to page 22, line 1); a search unit configured to search said storage medium for broadcast content information corresponding to said search condition, based on said search condition information received by said receiver (provision server PS, page 22, lines 16-24); a detector configured to detect an appearance frequency of said keyword by said broadcast programs, in the broadcast content information that was obtained as the search result by said search unit (provision server PS, page 22, line 30 to page 23, line 11), said detector configured to generate a ranking of said broadcast programs in a descending order of a higher appearance frequency of said keyword (provision server PS, page 19, lines 22-29), the detector configured to generate the ranking based on a number of times the keyword appears in each broadcast program (provision server PS, page 19, lines 22-29); and a transmitter configured to transmit information based on the appearance frequency of said keyword by said broadcast programs detected by said detector to said external device (provision server PS, page 23, lines 12-14).

Independent Claim 10 is directed to a program search method including registering a keyword showing the user's preference in broadcast programs (SP1, page 16, line 26 to page 17, line 2); receiving broadcast content information including the titles of broadcast programs that will be broadcasted by one or more broadcasting stations (SP6 and SP7, page 18, lines 1-11); detecting by a processor of a client terminal the appearance frequency of said keyword by said broadcast programs by searching the broadcast content information received in said receiving (SP8, page 18, lines 12-14); and generating a ranking of said broadcast programs in

a descending order of a higher appearance frequency of said keyword (SP9, page 18, line 15 to page 19, line 29), the ranking being based on a number of times the keyword appears in each broadcast program (page 19, lines 22-29).

Independent Claim 11 is directed to a program search method including storing broadcast content information including the broadcasting time and date and the title of a broadcast program that will be broadcasted by one or more broadcasting stations in a storage medium by the above broadcast programs (page 22, lines 16-24); receiving search condition information to specify at least either one of the broadcasting period, the title and the broadcasting station name of said broadcast program as a search condition, and a keyword for showing the user's preference in said broadcast programs, from an external device (SP23, page 21, line 27 to page 22, line 1); searching said storage medium for broadcast content information corresponding to said search condition, based on said search condition information received in said receiving (SP26, page 22, lines 16-24); detecting by a processor of a client terminal the appearance frequency of said keyword by said broadcast programs by searching broadcast content information that was obtained as the search result in said searching (SP27, page 22, line 30 to page 23, line 11); generating a ranking of said broadcast programs in a descending order of a higher appearance frequency of said keyword, the ranking being based on a number of times the keyword appears in each broadcast program (page 19, lines 22-29); and transmitting information based on the ranking to said external device (SP28, page 23, lines 12-14).

Independent Claim 12 is directed to a computer readable medium including computer executable instructions, wherein the instructions, when executed by a processor, cause the processor to perform a method including registering a keyword showing the user's preference in broadcast programs (SP1, page 16, line 26 to page 17, line 2); receiving broadcast content information including the titles of broadcast programs that will be broadcasted by one or

more broadcasting stations (SP6 and SP7, page 18, lines 1-11); detecting by a processor of a client terminal the appearance frequency of said keyword by said broadcast programs by searching the broadcast content information received in said receiving (SP8, page 18, lines 12-14); and generating a ranking of said broadcast programs in a descending order of a higher appearance frequency of said keyword (SP9, page 18, line 15 to page 19, line 29), the ranking being based on a number of times the keyword appears in each broadcast program (page 19, lines 22-29).

Independent Claim 13 is directed to a computer readable medium including computer executable instructions, wherein the instructions, when executed by a processor, cause the processor to perform a method including storing broadcast content information including the broadcasting time and date and the title of a broadcast program that will be broadcasted by one or more broadcasting stations in a storage medium by the above broadcast programs (page 22, lines 16-24); receiving search condition information to specify at least either one of the broadcasting period, the title and the broadcasting station name of said broadcast program as a search condition, and a keyword for showing the user's preference in said broadcast programs, from an external device (SP23, page 21, line 27 to page 22, line 1); searching said storage medium for broadcast content information corresponding to said search condition, based on said search condition information received in said receiving (SP26, page 22, lines 16-24); detecting by a processor of a client terminal the appearance frequency of said keyword by said broadcast programs by searching broadcast content information that was obtained as the search result in said searching (SP27, page 22, line 30 to page 23, line 11); generating a ranking of said broadcast programs in a descending order of a higher appearance frequency of said keyword, the ranking being based on a number of times the keyword appears in each broadcast program (page 19, lines 22-29); and transmitting information based on the ranking to said external device (SP28, page 23, lines 12-14).

## VI. GROUND OF REJECTION TO BE REVIEWED ON APPEAL

The ground of rejection to be reviewed on appeal is whether Claims 1, 2, 4-8, and 10-15 are anticipated under 35 U.S.C. §102(e) by Kanemitsu (U.S. Patent No. 6,928,262).

## VII. ARGUMENTS

### A. Claims 1, 2, 4-8, and 10-15 are not anticipated by Kanemitsu

Claim 1 recites in part:

a keyword registration unit configured to register a keyword for showing the user's preference in broadcast programs;

a communication unit, including a processor, configured to receive broadcast content information including the titles of said broadcast programs that will be broadcasted by one or more broadcasting stations; and

a detector configured to detect an appearance frequency of said keyword by said broadcast programs by searching the broadcast content information received by said communication unit, ***said detector configured to generate a ranking of said broadcast programs in a descending order of a higher appearance frequency of said keyword as a search result, the detector configured to generate the ranking based on a number of times the keyword appears in each broadcast program.***

Initially, it is respectfully noted that well settled case law holds that "A claim is anticipated only if each and every element ***as set forth in the claim*** is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). (Emphasis added.) See also MPEP §2131. It is respectfully submitted that Kanemitsu does not describe each and every element of any of the independent claims ***as set forth in claim***, as described below.

Kanemitsu describes a broadcast receiving device that searches broadcast content for a keyword, and displays all programs that include that keyword at least once.<sup>1</sup> The outstanding Office Action cited column 8, lines 35-61, column 10, lines 19-36, column 11,

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<sup>1</sup>See Kanemitsu, column 12, line 9 to column 13, line 5 and Figures 17 and 18.

lines 28-32, and Figure 11 of Kanemitsu as describing “the ranking of said broadcast programs in the descending order.”<sup>2</sup> However, it is respectfully submitted that columns 11-16 describe searching based on keywords, and the result is displaying every program including such a keyword, as shown in Figure 17 of Kanemitsu. There is no discussion in Kanemitsu that the programs are displayed in any particular order, or that any ranking of the programs is determined. Accordingly, columns 11-16 of Kanemitsu cannot teach or suggest “said detector configured to **generate a ranking of said broadcast programs** in a descending order of a higher appearance frequency of said keyword as a search result, the detector configured to generate the ranking based on a number of times the keyword appears in each broadcast program” as recited in Claim 1.

The outstanding Office Action further asserted that column 2, lines 46-58 of Kanemitsu describes a system that has the ability to detect a frequency appearance associated with a user preference. However, this does not accurately describe this portion of Kanemitsu. This portion, along with columns 8-11 of Kanemitsu, describes ranking a plurality of **topics**, such as “song title,” used to display search results. In this regard, the topics are ranked based on which topics are selected most often by a user, as described at column 10, lines 19-36. This ranking of topics has nothing to do with an appearance frequency of keywords. An example of a display of a topic having the highest priority rank is shown in Figure 21 of Kanemitsu. This figure shows that song title is the music topic used most often for searching music, and does not list or rank any broadcast programs at all. Thus, Figure 21 of Kanemitsu has nothing to do with **ranking broadcast programs based an appearance frequency of keywords**. Finally, column 11, lines 28-32 again describes that topics selected most often by a user are ranked in that priority order. Again, this has nothing to do with ranking broadcast programs based on an appearance frequency of keywords. Accordingly, the descriptions in

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<sup>2</sup>See the outstanding Office Action at page 5.

columns 8-11 cannot teach or suggest a “detector configured to generate a ranking of said ***broadcast programs*** in a descending order of a higher appearance frequency of said keyword, the detector configured to generate the ranking based on a number of times the keyword appears in each broadcast program.” In particular, the cited portions of Kanemitsu clearly do not describe this subject matter in as great a detail as claimed. Thus, it is respectfully submitted that the device of Kanemitsu cannot anticipate “a detector” as defined in Claim 1. Consequently, Claim 1 (and Claims 2, 4-6, 14, and 15 dependent therefrom) is not anticipated by Kanemitsu and is patentable thereover.

Claim 7 also recites in part a “detector configured to generate a ranking of said broadcast programs in a descending order of a higher appearance frequency of said keyword, the detector configured to generate the ranking based on a number of times the keyword appears in each broadcast program.” Accordingly, Claim 7 (and Claim 8 dependent therefrom) is patentable over Kanemitsu for at least the reasons described above with respect to Claim 1.

Claims 10-13 recite in part “generating a ranking of said broadcast programs in a descending order of a higher appearance frequency of said keyword, the ranking being based on a number of times the keyword appears in each broadcast program.” As noted above, Kanemitsu does not describe that the number of keyword hits in each individual broadcast content is even counted during a content search. Thus, it is respectfully submitted that Kanemitsu does not teach “generating” as defined in Claims 10-13. Consequently, Claims 10-13 are also not anticipated by Kanemitsu and are patentable thereover.

B. Claims 14 and 15 further patentably define over Kanemitsu

Moreover, Claims 14 and 15 recite subject matter that further patentably defines over Kanemitsu. The outstanding Office Action again cited column 8, lines 35-61 and Figure 22



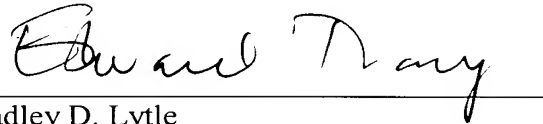
with regard to Claims 14 and 15 without any further explanation. However, as noted above, column 8, lines 35-61 has nothing to do with keyword searching of broadcast programs. In fact, this portion of Kanemitsu refers to Figure 21 as a display of the *topic* ranking. Figure 21 of Kanemitsu clearly does not describe “a display unit configured to display the ranking of the *broadcast programs* in the descending order of the higher appearance frequency of the keyword,” as none of the displayed topics are broadcast programs. Further, with respect to Claim 15, Figure 21 clearly does not show any appearance frequencies of a keyword in broadcast content information with a title of each corresponding broadcast program. Accordingly, Claims 14 and 15 clearly further patentably define over Kanemitsu.

Conclusion

It is respectfully requested that the outstanding rejections be REVERSED.

Respectfully submitted,

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## VIII. CLAIMS APPENDIX

Claim 1: A program search system comprising:

a keyword registration unit configured to register a keyword for showing the user's preference in broadcast programs;

a communication unit, including a processor, configured to receive broadcast content information including the titles of said broadcast programs that will be broadcasted by one or more broadcasting stations; and

a detector configured to detect an appearance frequency of said keyword by said broadcast programs by searching the broadcast content information received by said communication unit, said detector configured to generate a ranking of said broadcast programs in a descending order of a higher appearance frequency of said keyword as a search result, the detector configured to generate the ranking based on a number of times the keyword appears in each broadcast program.

Claim 2: The program search system according to claim 1, wherein said detector is configured to specify a broadcast program according to the appearance frequency of said keyword.

Claim 3 (Canceled).

Claim 4: The program search system according to claim 1, further comprising:

a search condition setting unit configured to set at least either one of the broadcasting period, the title and the broadcasting station of said broadcast program as a search condition is further included,

wherein said communication unit is configured to transmit request information to

request broadcast content information corresponding to said search condition set by said search condition setting unit from a storage device that stores broadcast content information including the broadcasting time and date and the titles of said broadcast programs that will be broadcasted by one or more broadcasting stations by the above broadcast programs, and is also configured to receive the broadcast content information transmitted from said storage device responding to the above request information.

Claim 5: The program search system according to claim 1, wherein said communication unit is configured to transmit request information to request broadcast content information from a storage device that stores broadcast content information including the title of said broadcast program being broadcasted by one or more broadcasting stations, and is also configured to receive the broadcast content information transmitted from said storage device responding to the above request information; and a storage unit configured to store said received broadcast content information is further included.

Claim 6: The program search system according to claim 1, wherein said communication unit is configured to receive electronic program listings formed by broadcast content information including the broadcasting time and date and the titles of said broadcast programs that will be broadcasted by one or more broadcasting stations; and said detector is configured to search the broadcast content information included in said electronic program listings for broadcast content information including said keyword, and to detect the appearance frequency of said keyword by said broadcast programs, in the broadcast content information that was obtained as the search result.

Claim 7: A program search system comprising:

a storage medium configured to store broadcast content information including the broadcasting time and date and the title of a broadcast program that will be broadcasted by one or more broadcasting stations by the above broadcast programs;

a receiver, including a processor, configured to receive search condition information to specify at least either one of the broadcasting period, the title and the broadcasting station name of said broadcast program as a search condition, and a keyword showing the user's preference in said broadcast programs, from an external device;

a search unit configured to search said storage medium for broadcast content information corresponding to said search condition, based on said search condition information received by said receiver;

a detector configured to detect an appearance frequency of said keyword by said broadcast programs, in the broadcast content information that was obtained as the search result by said search unit, said detector configured to generate a ranking of said broadcast programs in a descending order of a higher appearance frequency of said keyword, the detector configured to generate the ranking based on a number of times the keyword appears in each broadcast program; and

a transmitter configured to transmit information based on the appearance frequency of said keyword by said broadcast programs detected by said detector to said external device.

Claim 8: The program search system according to claim 7, wherein said detector is configured to generate information to specify a broadcast program, according to the appearance frequency of said keyword.

Claim 9 (Canceled).

Claim 10: A program search method comprising:

registering a keyword showing the user's preference in broadcast programs;  
receiving broadcast content information including the titles of broadcast programs that will be broadcasted by one or more broadcasting stations;  
detecting by a processor of a client terminal the appearance frequency of said keyword by said broadcast programs by searching the broadcast content information received in said receiving; and  
generating a ranking of said broadcast programs in a descending order of a higher appearance frequency of said keyword, the ranking being based on a number of times the keyword appears in each broadcast program.

Claim 11: A program search method comprising:

storing broadcast content information including the broadcasting time and date and the title of a broadcast program that will be broadcasted by one or more broadcasting stations in a storage medium by the above broadcast programs;  
receiving search condition information to specify at least either one of the broadcasting period, the title and the broadcasting station name of said broadcast program as a search condition, and a keyword for showing the user's preference in said broadcast programs, from an external device;  
searching said storage medium for broadcast content information corresponding to said search condition, based on said search condition information received in said receiving;  
detecting by a processor of a client terminal the appearance frequency of said keyword by said broadcast programs by searching broadcast content information that was obtained as the search result in said searching;  
generating a ranking of said broadcast programs in a descending order of a higher

appearance frequency of said keyword, the ranking being based on a number of times the keyword appears in each broadcast program; and

transmitting information based on the ranking to said external device.

Claim 12: A computer readable medium including computer executable instructions, wherein the instructions, when executed by a processor, cause the processor to perform a method:

registering a keyword showing the user's preference in broadcast programs;

receiving broadcast content information including the titles of broadcast programs that will be broadcasted by one or more broadcasting stations;

detecting the appearance frequency of said keyword by said broadcast programs by searching the broadcast content information received in said receiving; and

generating a ranking of said broadcast programs in a descending order of a higher appearance frequency of said keyword, the ranking being based on a number of times the keyword appears in each broadcast program.

Claim 13: A computer readable medium including computer executable instructions, wherein the instructions, when executed by a processor, cause the processor to perform a method:

storing broadcast content information including the broadcasting time and date and the title of a broadcast program that will be broadcasted by one or more broadcasting stations in a storage medium by the above broadcast programs;

receiving search condition information to specify at least either one of the broadcasting period, the title and the broadcasting station name of said broadcast program as a search condition, and a keyword for showing the user's preference in said broadcast

programs, from an external device;

searching said storage medium for broadcast content information corresponding to said search condition, based on said search condition information received in said receiving;

detecting the appearance frequency of said keyword by said broadcast programs by searching broadcast content information that was obtained as the search result in said searching;

generating a ranking of said broadcast programs in a descending order of a higher appearance frequency of said keyword, the ranking being based on a number of times the keyword appears in each broadcast program; and

transmitting information based on the ranking to said external device.

Claim 14: The program search system according to claim 1, further comprising:

a display unit configured to display the ranking of the broadcast programs in the descending order of the higher appearance frequency of the keyword.

Claim 15: The program search system according to claim 14, wherein the display unit is configured to display the appearance frequency of the keyword in the broadcast content information with a title of each corresponding broadcast program.

IX. EVIDENCE APPENDIX

None.



Application Serial No. 10/586,922  
Appeal Brief filed herewith

X. RELATED PROCEEDINGS APPENDIX

None.